

## *Panama Canal*

### *Teacher's Guide*

This guide has been created to accompany *Panama Canal*, a 90-minute AMERICAN EXPERIENCE documentary that tells the epic story of one of the most innovative engineering feats of all time -- and one of the most expensive in terms of both lives and money. It is a story of the triumph of technology over nature; a chronicle of America's emergence as a global power; and a prism through which to view President Theodore Roosevelt's maverick approach to governance. Simultaneously, it is a case study in segregation, racism, and social inequity.

Intended to spark reflection on the key themes and stories presented in the film, this guide can be used by educators, students, and other viewers as a starting point from which to discuss and analyze the political, scientific, and social aspects of the Panama Canal's construction, history, and legacy. The guide can also serve as a resource in science, engineering, history, world studies, social studies, government, civics, English, and writing courses.

### Learning Objectives and Curriculum Standards

The Panama Canal documentary provides an excellent resource for discussion, writing, and activities that meet an array of state and national curriculum standards and benchmarks.

These include fostering an understanding of:

- The changing role of the United States in world affairs through World War I and the impact of U.S. foreign policies in the early part of the 20th century (e.g., places the U.S. claimed, occupied or protected; the U.S. role in the Panama Revolution of 1903; and the global significance of the Panama Canal)
- The relationships among science, technology, society, and the individual

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- The ways in which technology has influenced the course of history (e.g., revolutions in transportation, manufacturing, engineering, public health, and medicine)
- The effect of scientific innovations on early 20th-century society (e.g., major medical successes in the treatment of infectious diseases such as yellow fever)
- The impact of human actions on the physical environment
- The causes and consequences of economic imbalances and social inequalities among the world's peoples
- The ways in which expanding capitalistic enterprise, commercialization, and the use of indigenous labor affected the balance of power among nations and contributed to changing class and race relations

Standards adapted from Mid-continent Research for Education and Learning's *Content Knowledge Standards and Benchmark Database*. ([www.mcrel.org/standards](http://www.mcrel.org/standards))

### Using This Guide

This guide is divided into two parts. Part One (Discussing the Film) presents a series of discussion questions organized into three thematic blocks that focus on the political, technological, and social aspects of the Panama Canal; these can be used for small-group or whole-group discussion, or as writing prompts. In Part Two, (Activities & Extensions) you'll find suggested projects and extensions related to the film, including activities on interpreting editorial cartoons and analyzing primary-source documents. Please note that in addition to its national broadcast on PBS, *Panama Canal* will be available for online viewing in streaming format at [www.pbs.org/wgbh/americanexperience/films/panama/player/](http://www.pbs.org/wgbh/americanexperience/films/panama/player/).

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#### Part One: Discussing the Film

##### *Before Viewing*

Making predictions -- Before watching the documentary, locate Panama on a world map and discuss the following questions:

- As early as the 1500s, people had dreamed of building a canal through Panama. What do you think accounts for the appeal of constructing a canal through the isthmus of Panama?
- What obstacles do you imagine engineers and government officials encountered when they set out to build the canal? Make a list and compare your predictions to facts presented in the film.

##### *During Viewing*

Tracking transformations -- *Panama Canal* depicts a number of dramatic transformations-- political, personal, technological, and environmental. As you watch the film, make note of each transformation that you see. Remember that some transformations are readily apparent, while others are internal or invisible. Have your notes on hand for class discussion of the film.

##### *After Viewing*

The following post-viewing discussion questions are organized into three strands: political history, technology and innovation, and social history.

#### POLITICAL HISTORY IN FOCUS

**The Panama Revolution.** Describe the process by which America acquired the land rights to the Panama Canal zone. Review Matthew Parker's commentary on this "bloodless revolution," which appears in Chapter 2 of the film. Why was the American public "confused and very

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divided" upon learning of the revolution in Panama? In small groups or as a class, stage a debate in which you weigh the two sides of this argument.

**The path to America's future.** What did America have to gain from the Panama Canal? Consider the economic, political, scientific, and cultural aspects of this question as they apply both to the U.S. and to the world. In what ways did President Theodore Roosevelt see the canal as "the obvious path to America's future"? What is your assessment of Roosevelt's interest in the canal? Was he inspired? Arrogant? Visionary? Imperialist? Explain.

**Roosevelt's visit to Panama.** What motivated President Roosevelt to travel to Panama in late 1906? Why did the President choose to go to Panama during the wettest time of year, and what does this say about his character? What was unprecedented about this trip-and why was it the turning point in the history of the canal's construction? How did Roosevelt's visit affect Rose van Hardeveld and other observers? (Review Chapter 7 as you consider these questions. You can view Roosevelt's speech to Congress [here](http://www.pbs.org/wgbh/americanexperience/features/primary-resources/panama-message/) (www.pbs.org/wgbh/americanexperience/features/primary-resources/panama-message/).)

#### Technology and Innovation in Focus

**An elusive dream.** Who was Ferdinand de Lesseps, and why was he selected by the French to build a canal in Panama? What were the key differences between conditions in the Suez region, where de Lesseps had successfully overseen the construction of a canal, and Panama? What became of de Lesseps' effort to build a canal in Panama? What lessons do you think other engineers took from de Lesseps' failure?

**Engineering innovations.** What made the railroad "the heart of the effort" during construction of the canal? What ingenious innovation did Chief Engineer John Stevens use to maximize the efficiency of the railroad? When Stevens realized that building a canal at sea level would doom the canal to failure, what solution did he come up with? Review chapter 4

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as you consider these questions. Read an article on the Canal's [Chief Engineers](http://www.pbs.org/wgbh/americanexperience/features/general-article/panama-engineers/) ([www.pbs.org/wgbh/americanexperience/features/general-article/panama-engineers/](http://www.pbs.org/wgbh/americanexperience/features/general-article/panama-engineers/)), and use the [interactive map](http://www.pbs.org/wgbh/americanexperience/features/flash-interactive/panama-map/) ([www.pbs.org/wgbh/americanexperience/features/flash-interactive/panama-map/](http://www.pbs.org/wgbh/americanexperience/features/flash-interactive/panama-map/)) of Innovation on the Canal.

**Eradicating yellow fever.** Who was Colonel William Gorgas, and what was his theory about how Yellow Fever could be eradicated? What led President Roosevelt to back Gorgas' theory? How was this public-health campaign -- the most expensive in history -- carried out? What were the logistics? What were the results? How did the eradication of Yellow Fever affect progress on the canal? (Review Chapter 6 as you think about these questions, and read the article on [Yellow Fever](http://www.pbs.org/wgbh/americanexperience/features/general-article/panama-fever/) ([www.pbs.org/wgbh/americanexperience/features/general-article/panama-fever/](http://www.pbs.org/wgbh/americanexperience/features/general-article/panama-fever/)).)

#### SOCIAL HISTORY IN FOCUS

**Making history.** Who was Jan van Hardeveld, and what do you think motivated him -- and other young Americans, both immigrants and native-born -- to go to Panama? In 1906, Jan's wife Rose made the decision to join her husband in Panama, declaring that this would be their chance "to be among those who make history." Imagine the decision-making process the van Hardevelds went through and, working in pairs, create a dialogue between Rose and Jan as they discuss whether to relocate their family to Panama. What were the pros and cons? How did their decision relate to their belief in "the American dream"? Do you think they made a wise choice? What would you have done? Discuss. (Read excerpts from [Rose van Hardeveld's journal](http://www.pbs.org/wgbh/americanexperience/features/primary-resources/panama-hardeveld/) ([www.pbs.org/wgbh/americanexperience/features/primary-resources/panama-hardeveld/](http://www.pbs.org/wgbh/americanexperience/features/primary-resources/panama-hardeveld/)).)

**Segregation and discrimination.** What was the "Panama Man," and how were advertising and marketing techniques employed to recruit workers? From what countries were most unskilled laborers who worked on the canal project recruited? Which workers were paid in gold? Who was paid in silver? What were the consequences of being a "gold worker" versus being a "silver

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worker"? Compare this system (described in Chapter 5 of the film) to segregation as it existed in the U.S. in the early part of the 20th century. (Read the [article on The Workers](http://www.pbs.org/wgbh/americanexperience/features/general-article/panama-workers/) (www.pbs.org/wgbh/americanexperience/features/general-article/panama-workers/) and browse the [photo gallery](http://www.pbs.org/wgbh/americanexperience/features/photo-gallery/panama-gallery/) [www.pbs.org/wgbh/americanexperience/features/photo-gallery/panama-gallery/] on the workers.)

**The price of progress.** Given the extraordinary number of lives that were lost during the canal project, what is your assessment of the morality of building the canal? Are human lives an inevitable "price of progress"? If all the workers on the canal project had been from the United States, how might working conditions have been different? How might the entire project be different?

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### Part Two: Activities and Extensions

#### Teddy Roosevelt and the Canal: A Gallery of Views

During the early part of the 20th century, the Panama Canal was the subject of hundreds of editorial cartoons. Take a closer look at four of these images, which are reprinted below. Then answer the questions that follow.



“My, my, such possibilities” (Library of Congress)

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“Coup d’Etat, 1903” (New York World)



“The President in Panama” (The Washington Post)

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“The Man Who Can Make Dirt Fly” (Corbis)

### For Discussion or Writing

1. How is Teddy Roosevelt portrayed in each of these cartoons? Which depiction is the most favorable? The most negative? Point to specific symbols and details in each image to support your answer.
2. What comment is each cartoonist making about Roosevelt's involvement in the Panama Canal project?
3. How is Panama portrayed in the Coup d'Etat cartoon? Does this cartoonist appear to support or oppose the "Roosevelt Doctrine"? Explain.

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4. What images of America and its role in global affairs are presented in these cartoons? Is there a variety of viewpoints about America as a global power or a consistent point of view among the cartoonists? Discuss.

**Understanding the lock canal.** One of the most revolutionary aspects of the Panama Canal was its use of a system of locks. Go to [www.pbs.org/wgbh/americanexperience/features/flash-interactive/panama-map/](http://www.pbs.org/wgbh/americanexperience/features/flash-interactive/panama-map/) and view the interactive feature entitled "Innovation in the Canal." Working individually or as part of a small group, choose one of the seven hot spots on the map -- Gatún Locks, Gatún Dam, Hydroelectric Power Plant, Gatún Lake, New Panama Railroad, Culebra Cut or Miraflores Locks -- and click on the "Learn more" link. Using the information presented here, become an expert on this aspect of the Canal and prepare a short presentation for your classmates to help them understand the following:

- What is innovative about this aspect of the Canal?
- What problem or need did this innovation address?
- What dangers or obstacles were involved in its creation?
- What statistics help tell the story of this part of the Canal?

**Witnesses to history.** Review the transcript of the film, available at <http://www.pbs.org/wgbh/americanexperience/features/transcript/panama/>, and note eyewitness testimony and reflections from laborers who participated in the building of the canal. What were their daily lives like? What contrasts are presented between conditions for white workers and workers of color? What story or detail strikes you as most powerful? Most disturbing? Most unjust? Most inspiring? After reviewing these statements, imagine that you are a newspaper reporter who has been assigned to write an article on daily life in Panama during construction of the Canal. Come up with five interview questions that you would pose to workers in Panama, and another five questions that you would pose to the Americans who

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were overseeing the Canal's construction. To extend this activity, share your questions with classmates and have them answer from the point of view of the person being interviewed.

**Roosevelt and the media.** Teddy Roosevelt's 12-day trip to Panama in November 1906 marked the first time an American President left the U.S. while in office. How did Roosevelt use the media to his advantage-and how did the media respond to Roosevelt's daring move? Analyze the photo of Roosevelt on the Bucyrus steam shovel, taken while he was visiting the Culebra Cut (in Chapter 7 of the film). What message did this photo send to Americans? To the world? What details in the photo help convey this message? Then read the newspaper accounts of Roosevelt's visit that appeared in the *Columbus Enquirer-Sun*, *Bellingham Herald* and *Aberdeen Daily American* -- reprinted [here](http://www.newsinhistory.com/blog/teddy-roosevelt-first-president-go-abroad-leaves-inspect-panama-canal) (www.newsinhistory.com/blog/teddy-roosevelt-first-president-go-abroad-leaves-inspect-panama-canal) -- or conduct your own research to track down additional media reports of Roosevelt's historic trip. Using evidence from these press accounts, write a brief essay in which you characterize the media's view of Roosevelt's visit to Panama.

**A new balance of power.** In 1999, control of the Panama Canal shifted from the United States to Panama, under the terms of a 1977 treaty. In advocating ratification of this treaty, U.S. President Jimmy Carter made the following statement:

Seventy-five years ago, our Nation signed a treaty which gave us rights to build a canal across Panama, to take the historic step of joining the Atlantic and Pacific Oceans. The results of the agreement have been of great benefit to ourselves and to other nations throughout the world who navigate the high seas. The building of the canal was one of the greatest engineering feats of history. Although massive in concept and construction, it's relatively simple in design and has been reliable and efficient in operation. We Americans are justly and deeply proud of this great achievement. The canal has also been a source of pride and benefit to the people of Panama, but a cause of some

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continuing discontent. Because we have controlled a 10 mile-wide strip of land across the heart of their country and because they considered the original terms of the agreement to be unfair, the people of Panama have been dissatisfied with the treaty. It was drafted here in our country and was not signed by any Panamanian. Our own Secretary of State who did sign the original treaty said it was "vastly advantageous to the United States and not so advantageous to Panama." In 1964, after consulting with former Presidents Truman and Eisenhower, President Johnson committed our Nation to work towards a new treaty with the Republic of Panama. And last summer, after 14 years of negotiation under two Democratic Presidents and two Republican Presidents, we reached and signed an agreement that is fair and beneficial to both countries. The United States Senate will soon be debating whether these treaties should be ratified. Throughout the negotiations, we were determined that our national security interests would be protected; that the canal would always be open and neutral and available to ships of all nations; that in time of need or emergency our warships would have the right to go to the head of the line for priority passage through the canal; and that our military forces would have the permanent right to defend the canal if it should ever be in danger. The new treaties meet all of these requirements."

Based on your understanding of the history of the canal, write a response to Carter's statement -- and to the decision to turn control of the Canal over to Panama -- from the point of view of one of the following: President Teddy Roosevelt; Jan or Rose van Hardeveld; Chief Engineer John Stevens; or Granville Clark, John Bowen or another worker who risked his life to work on the canal. You could also create a dialogue between two of these people in which they debate the proposed handover of the Canal Zone.

**Culminating activity: Assessing the Canal's legacy.** One hundred years after the opening of the Panama Canal, what do you see as the most important lessons -- both positive and

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negative -- that can be learned from studying the political, social, and technological history of the canal project? Share your thoughts in the form of a newspaper editorial that could be published on the 100th anniversary of the Canal's opening. (Read the [Then & Now article](#) ([www.pbs.org/wgbh/americanexperience/features/then-and-now/panama/](http://www.pbs.org/wgbh/americanexperience/features/then-and-now/panama/)) on more recent changes to the Canal.)

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